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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,175	10/30/2003	Nevo Idan	42P16626	9911

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EXAMINER

TRAN, VINCENT HUY

ART UNIT PAPER NUMBER

2115

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/698,175

Applicant(s)

IDAN ET AL.

Examiner

Vincent T. Tran

Art Unit

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-15, 26 and 27 is/are rejected.
- 7) ☒ Claim(s) 8, 16 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Action is responsive to the communication filed on 10/30/03.
2. Claims 1-27 are pending for examination.

Claim Objections

3. Claim 10 is objected to because of the following informalities: Claim 10 is depended on claim 10. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by Lee et al. (Le) US 20040088590.

6. As per claim 1, Lee discloses a method, comprising:

dynamically determining a power mode with which to operate an add-on component within a host processing system; and

operating the add-on component in the power mode [fig. 4; paragraph 0035, 0040].

7. As per claim 2, Lee discloses the processing system comprises a Network Interface Card (NIC) [10 fig. 1].

8. As per claim 3, Lee discloses the processing system comprises a mobile processing system [paragraph 0004].

9. Claims 1-3, 7, 11-12, 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Gosselin et al. (Gosselin) U.S. Patent 6,976,179.

10. As per claim 1, Gosselin discloses a method comprising:
dynamically determining a power mode with which to operate an add-on component within a host processing system; and
operating the add-on component in the power mode [col. 9 lines 4-32].

11. As per claim 2, Gosselin discloses the processing system comprises a Network Interface Card (NIC) [col. 1 lines 33-51].

12. As per claim 3, Gosselin discloses the processing system comprises a mobile processing system [fig. 1B].

13. As per claim 7, Gosselin discloses that the method is performed by a driver for the add-on component [from col. 8 line 56 to col. 9 line 3].

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14. As per claim 11-12, Gosselin teach a method for dynamically determining a power mode for an add-on component. Therefore, Gosselin teach the computer readable medium having stored thereon a sequence of instructions to perform the method.

15. As per claim 19, Gosselin discloses a system, comprising:

a processor [col. 2 lines 54];

a Network Interface Card (NIC) coupled to the processor [col. 2 lines 48-55; col. 1 lines 42-49];

a memory [inherent] coupled to the processor, the memory storing instructions which when executed by the processor, cause the processor to perform a method [col. 2 lines 56-60] comprising:

dynamically determine a power mode with which to operating the NIC; and
operating the NIC in the power mode [col. 9 lines 4-32].

16. As per claim 20, Gosselin discloses the processing system comprises a mobile processing system [fig. 1B].

17. Gosselin discloses that the method is performed by a driver for the add-on component [from col. 8 line 56 to col. 9 line 3].

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

20. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

21. Claims 4-6, 9, 13-15, 17, 21-23, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gosselin as applied to claim 1 or 11 above, and further in view of Yu et al. US 20050024651 ("Yu").

22. As per claim 4, Gosselin teaches
determining a battery level for a battery of the host processing system;
calculating a power mode based on the battery level; and
selecting the power mode based on the power mode value [col. 9 lines 4-32].
Gosselin does not teach the determining a processor usage for a processor.
Yu teaches another method relates to power conservation in a mobile device.

Specifically, Yu teaches

determining a processor usage for a processor;
determining a battery level for a battery of;
calculating a operating mode value based on the processor usage and the battery level;
and selecting the operating mode based on the operating mode value [paragraph 0024-0025, 0036, 0038].

in summary, Yu teaches, depended on the level of remaining power and the processor usage, the adaptive mode decision module [fig. 2] operable to select one of the suitable processing modes; wherein according to the selected processing mode, the device will try to perform the processing step at a different level of complexity by bypass some of the step or process the step at a slower rate in order to conserve power.

Note: the processing modes define by Yu is consistence with the definition “power mode” define by the applicant’s disclosure; wherein, depended on the one the processor usage and the battery level, the NIC selected the power mode which allow it to do as less as possible by turning off functional units or perform the operation at a slow rate [paragraph 0028 and 0035 of applicant].

Gosselin and Yu are analogous art because they from similar problem solving area; conserving power in a mobile device.

Therefore, at the time of the invention was made, it would have been obvious to one of ordinary skill in the art the have included the determining of the processor usage to the Gosselin system as taught by Yu in the calculation of the power mode level for the add-on peripherals.

The suggestion/motivation for doing so would have been to further conserve power by optimizing/balancing the amount of data that an add-on peripheral can process and the amount of data that the processor of the host device can handle.

Therefore, it would have been obvious to combine Gosselin with Yu to obtain the invention as specified in claim 1.

23. As per claim 5, Yu does not specifically teach that the determining of the processor usage comprises reading a value corresponding to the processor usage from a register of the processor. However, Yu teaches the processor usage can be measured by measuring the percentage of the total processor time that all the applications being run by the processor use [paragraph 0038].

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to read the value from a register to determine processor usage because applicant has not disclosed that by read the value from a register to determine processor usage provides an advantage, it used to a particular purpose, or solves a stated problem. One of ordinary skill in the art, further more, would have expected applicant's invention to perform equally well with either the method taught by Yu or by applicant because both method perform the same function of determining the processor usage level.

Therefore, it would have been an obvious matter of design choice to modify Yu to obtain the invention as specified in claim 5.

24. As per claim 6, design choice.

25. As per claim 9, both Gosselin [fig. 4] and Yu [fig. 5] teach each power mode comprises operating parameters for functional units of the add-on component.

26. Claim 10, 18, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gosselin and Yu as applied to claim 1, 9 or 11, 17 or 19, 26 above, and further in view of Collins U.S. Patent 6,697,573.

27. As per claim 10, the system of Gosselin modified by Yu does not teach wherein one of the operating parameters comprises how often to scan for a wireless network connection.

Collins teaches another method for dynamically invoking power saving option in a battery powered devices, such as a cellular telephone or mobile device, so that the period of use or run-time of the device is extended as the capacity remaining in the battery decreases. Specifically, Collins teach the system comprises a plurality of parameters for functional units wherein one of the operating parameters comprises how often to scan for a wireless network connection [fig. 4].

At the time of the invention was made, it would have been obvious to one of ordinary skill in the art to have modified the system of Gosselin and Yu with the parameters comprises how often to scan for a wireless network connection of Collins in order to conserve the power of the battery.

Allowable Subject Matter

28. Claims 8, 16, 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent T. Tran whose telephone number is (571) 272-7210. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas c. Lee can be reached on (571) 272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vincent Tran.



**CHUN CAO
PRIMARY EXAMINER**